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RSC No. 96/61

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BADIA FIESOLANA, SAN DOMENICO (FI)

© Barrell, Morgan and Pain
Printed in Italy in December 1996
European University Institute
Badia Fiesolana
I – 50016 San Domenico (FI)
Italy

Robert Schuman Centre

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I. Introduction

There is increasing concern about the potential impact of the measures which some European Union countries are taking to prepare for the single currency. Under the terms of the Maastricht Treaty, countries have to satisfy a number of criteria to be eligible for economic and monetary union. In particular, countries are required to adhere to guidelines for their public finances which constrain both government borrowing and debt stocks. Since these restrictions imply a tighter fiscal stance than the current fiscal positions in most countries, it appears likely that some fiscal contraction is necessary if countries are to qualify for monetary union. At the same time, European unemployment has risen to historically high levels. This has led to fears that attempts to meet the Maastricht Fiscal Criteria will have a deflationary impact and further add to Europe's serious unemployment problem.

This article uses the National Institute of Economic and Social Research global macro-econometric model (NiGEM) to examine the employment effects of attempts to satisfy the Maastricht Fiscal Criteria using a macro model. We begin by discussing the rationale for the use of fixed, common reference values for fiscal deficits and debt ratios in the Maastricht Treaty. There are two particularly important aspects to emphasise for our present analysis. First, the reference values are consistent with the average fiscal policies pursued over the past by many member states. This implies that some form of fiscal consolidation was to be expected in Europe after the cyclical downturn of the early 1990s, irrespective of the requirements of the Maastricht Treaty. Second, the Treaty allows some scope for debts and deficits to temporarily exceed the reference values. This raises the question of the extent of any fiscal consolidation required to satisfy the Treaty requirements at a particular time. We then review a number of existing studies of the impact of fiscal policy changes in Europe and illustrate the extent to which the results are dependent upon the baseline projections used for the policy simulations and the allowance for offsetting effects from monetary policy changes. Section III provides an overview of the structure and simulation properties of NiGEM, focusing on the structure of national labour markets and the use of policy rules.

In order to appraise the potential impact of the criteria it is necessary to adopt a baseline scenario for the European economies. Section IV outlines our base projections for the European economies and the prospects for economic and monetary union. The results of simulations in which all countries meet the fiscal criteria are then discussed in section V, along with an alternative scenario under which the Maastricht treaty criteria are abandoned, and countries pursue similar fiscal policies to those adopted in the 1980s.

II. The Maastricht Fiscal Convergence Criteria

There is a large body of recent literature on fiscal systems and the prospective impact of the Maastricht convergence criteria. This new work has considered both the theoretical justification for explicit fiscal criteria and the appropriate choice of indicators. There are two aspects to the theoretical analysis. First, there is the question of what fiscal limits governments should try to adhere to, and second, whether there is a need for supranational fiscal rules. We briefly review the literature on the appropriateness of the criteria and the predicted economic impact of adhering to them.

The Choice of Fiscal Rules

Ultimately the path of fiscal policy is guided by the need to ensure that the government remains solvent. There are a number of ways of approaching this question. A useful overview is provided by Blanchard *et al.* (1990). In general, a sustainable fiscal policy is one under which the prospective future debt-GDP ratio can be expected to stabilise. The evolution of the debt ratio depends upon both the primary budget deficit and the burden of debt interest payments. If an economy is dynamically efficient, the real interest rate exceeds the growth rate, and a primary surplus is necessary if the debt stock is to stabilise as a percentage of GDP. At the present time, countries with a high ratio of outstanding debt, such as Italy, Greece and Belgium, are likely to have to run a primary surplus in order to stabilise the overall debt ratio.

The need for solvency does not provide any guidance as to the appropriate level of the eventual debt and deficit ratios. The Maastricht Treaty suggests reference values of 60 per cent and 3 per cent respectively, reflecting the average record of those member states who pursued prudent fiscal policies in last two decades (Arrowsmith, 1995). A detailed account of the negotiations behind the treaty is provided by Bini-Smaghi *et al.* (1994). The deficit target is consistent in the long-term with the debt target if the long-term rate of growth of nominal GDP is 5 per cent, broadly in line with the rate of growth in the core countries of Germany, France and the Benelux countries over the past decade.

The Maastricht fiscal rules set objectives which differ from those presently adopted in a number of member countries. Some, such as the present UK administration, seek to pursue an objective of balancing the budget across the economic cycle as a whole. An alternative objective, adopted notably in Germany and the Netherlands, is that of the so-called 'golden rule', whereby on average the government only issues debt to finance net capital expenditure, so that the change in the debt stock is equal to the change in the asset stock from

which revenue can be obtained to meet interest payments. The Maastricht Treaty contains an ancillary provision (Article 104c) in which it is made clear that evaluation of the national budgetary stance should take into account whether the fiscal deficit exceeds investment expenditure, reflecting the objectives of many of the delegates involved in the treaty negotiations (Bini-Smaghi *et al.*, 1994). There are practical problems associated with the pursuit of either of these alternative rules. A policy of balancing the budget over the economic cycle simply means that fiscal surpluses at times of strong economic growth must offset deficits at times of recession. Budgetary items such as unemployment benefit payments and corporate tax revenues are usually pro-cyclical, and hence the deficit would also display a cyclical pattern even if policy were, on balance, neutral. It is clear that many governments undertake considerable amounts of fiscal stabilisation (Bayoumi and Eichengreen, 1994) raising the cyclicality of the deficit. To some extent this is also reflected in the Maastricht Treaty, with Article 104(c) noting that deficits may exceed the reference value if the excess is 'only exceptional or temporary', or if 'the ratio has declined substantially and continuously' and is reaching the reference value. However, it is not yet clear how this will be interpreted in practice if a downturn persists for some time. One possibility might be to calculate cyclically-adjusted fiscal deficits, although such estimates are likely to prove extremely sensitive both to the method of calculation of the level of output that might be expected if the economy were on trend and to the sensitivity of revenues and expenditure to the cycle, as is shown in Barrell *et al.* (1994).

This issue is one of the factors which leads Eichengreen (1992) to argue that the Maastricht criteria may not provide particularly useful information about a government whose current reputation is 'good', even though they will enable markets to assess whether profligate governments are becoming disciplined. Governments with a history of sound public finances could afford to temporarily run deficits in excess of 3 per cent of GDP in a cyclical downturn, without violating the debt criterion in the Treaty. Governments with a history of profligacy might find it more difficult to account for a related increase in their deficits. However, this view is unlikely to be accepted by all national authorities. The 1995 annual report of the Bundesbank suggests that the debt and deficit reference values should be treated as absolute ceilings rather than target figures if budgetary discipline is to be exerted in full. One implication of this position is that countries should be aiming for budget deficits well under 3 per cent of GDP by 1999, since, on our forecasts at least, a cyclical peak is projected to occur in the European economy around then.

A rigid pursuit of the 'golden rule' objective is hampered by the difficulties in fully distinguishing between current and capital expenditure, particularly in

government accounts. Furthermore, governments may not directly appropriate the full social or financial returns from capital projects and hence revenues may not rise to offset the increased financial costs incurred from increased borrowing. There is also little reason why governments should be prevented from borrowing to finance current expenditure, if it were felt equitable to spread the costs of particular current programmes across several generations of taxpayers. German unification and its associated costs are an example of this, although even here the extra debt incurred is partly offset by the value of the assets owned by the former East German administration.

There are a number of criticisms that have been made about the definition of public indebtedness adopted in the Maastricht Treaty. Buiter *et al.* (1993) criticise the treaty both for focusing on the gross debt of the general government sector rather than the net debt, and for neglecting the impact of inflation. The outstanding level of gross debt can be very different from the level of the net debt, since the former includes the monetary base and does not take account of gross financial assets. For example, in 1990, gross debt in the Netherlands was equivalent to 78 per cent of GDP compared with net debt of 59 per cent, largely as a result of the significant assets held by the funded public sector pension scheme. A focus on gross debt offers scope for fulfilling the fiscal criteria through portfolio reallocation, either through the sale of financial assets or through the sale of capital assets via privatisation. In neither case is there any change in either net indebtedness or in long-term solvency.

Inflation can also have an important impact on the sustainability of any fiscal position. Countries with high levels of anticipated inflation will be paying a significant amount of nominal interest which will be cancelled out by a corresponding reduction in the real value of the debt stock. Other things being equal, they can undertake a higher level of borrowing whilst maintaining a given debt to GDP ratio. Similarly, countries with higher trend growth rates can safely run higher deficits, as their debt to GDP ratio will be stabilised through faster economic growth. These questions are particularly relevant to some of the southern European member states, who can be expected to experience faster growth rates and higher measured inflation as a result of structural change than northern European states. Of course, in practice, the inflation and long-term interest rate criteria in the Maastricht Treaty, together with the objectives of a European Central Bank, may limit the extent to which the optimal inflation-adjusted deficit can differ from the reference values.

A further alternative to the use of gross debt would be to focus on the overall net worth of the public sector, as suggested by Pain *et al.* (1994), with account being taken of prospective developments within the public sector balance sheet

as well as the impact of anticipated inflation on the debt burden and depreciation on the capital stock. Properly defined, the net worth of the public sector would include both the public sector's claim over natural resources as well as future liabilities such as pension commitments. The New Zealand government has already begun to utilise such an indicator in the fiscal process. Hills (1989) provides some illustrative estimates of the balance sheet of the UK public sector. Equivalent estimates have yet to be developed for many other EU members, although Van den Noord and Herd (1993) present estimates of the net present value of unfunded future pension liabilities. This policy can be viewed as a stock counterpart to the 'golden rule'. Again, it is quite possible that particular fiscal stances which appear either unduly restrictive or profligate, may in fact be consistent with the maintenance of the net worth of the public sector when set against other developments that affect the balance sheet of the public sector but not the actual financial deficit. Whilst we do not pursue this issue further in this paper, we consider the development of balance sheet estimates for all the EU members to be a matter of considerable importance in order that fiscal trends within the EU might be viewed with a clearer long-term perspective.

The Need For Supranational Rules

The second area of debate surrounding the fiscal criteria is about the need for supranational rules. An alternative to the use of common reference values would be to allow member states to pursue their own national policies, provided such policies could be shown to ensure that their own solvency was maintained. The literature suggests that there are a number of pertinent reasons for the imposition of common reference values. Economic integration will increase the externalities of national fiscal decisions. In principle, the formation of a monetary union may encourage national governments to raise borrowing to unsustainable levels, possibly even to levels that threaten the stability of the union as a whole, by initially reducing the marginal cost of borrowing in member states which traditionally had high and variable inflation and a fluctuating and depreciating exchange rate. Investors in such countries would no longer require interest premia to cover these risks, and hence interest rates could well fall rather more than inflation. Ultimately, however, the reduction in the risk premium may be offset by a perceived rise in the possibility of eventual default. If so, costly pecuniary externalities can arise in the absence of fiscal rules. First, if capital is mobile and capital markets require higher (real) interest rates, deficit spending that drives up interest rates at home will also do so abroad (Canzoneri and Diba, 1991), with possible adverse distributional consequences. Second, national governments may have a belief that in the event of their insolvency they would be 'bailed-out', either through other member states taking responsibility for their debt, or through greater monetisation of their debt by the union-wide monetary

authority. Concern about these possibilities is reflected in the Maastricht Treaty, with Articles 104-104b asserting that neither the Community nor member states would be liable for the commitments of particular governments, and preventing the European Central Bank (ECB) from either granting direct overdraft facilities or directly purchasing the debt of member states.

The rules governing fiscal debt and deficit ratios, together with the provision for the imposition of financial penalties if they are deemed to be unacceptably exceeded by the European Commission, can thus be viewed as necessary in order to prevent financial instability. Eichengreen (1992) demonstrates that the balanced budget amendments affecting many state governments in the United States have a significant impact on state bond yields, reducing the cost of borrowing. Bean (1992) suggests an alternative form of fiscal discipline, with national payments to the Community budget being made dependent on national debt and deficit levels in an appropriate manner. However, such an approach could involve the use of additional rules which may be as arbitrary as the Maastricht ones.

An additional issue which could also give rise to the need for EU-wide fiscal rules is the perceived need for rules over particular budgetary items, especially tax harmonisation, in order to prevent excessive fiscal competition. It is likely that harmonisation of indirect taxes would have some additional economic effects to those from simply meeting the Maastricht criteria, see for example Roberti and Visaggio (1994), although we do not seek to quantify the effects in this study.

The Economic Impact of the Fiscal Criteria

A number of earlier studies have attempted to quantify the effects on output and employment of fiscal policy changes, and in particular from meeting the Maastricht criteria. In general their findings largely depend on two factors, the baseline projection and the monetary policy response to any change in fiscal policy. A tighter fiscal stance throughout the Union may be expected to reduce real interest rates everywhere (Correia-Nunes and Stemitsiotis, 1995). Additionally, countries which have to take new measures to tighten fiscal policy to meet the Maastricht criteria may experience lower interest rates if the risk premia on their debt declines. It is generally accepted that if risk-adjusted interest rates are lower than had previously been expected, and if interest rates remain unchanged elsewhere, the exchange rate will initially depreciate, in line with the implications of theoretical models with forward-looking financial markets and sticky wages and prices, as in Dornbusch (1976). This relaxation in the stance of monetary policy will tend to offset the contractionary effects of

the tighter fiscal stance. Studies that allow for the full effects of monetary policy have typically found a smaller impact on output than more traditional Keynesian studies that only partially acknowledge these effects. Eichengreen (1992, pg.28) cites a number of studies in which the monetary policy effects are found to dominate any fiscal spillovers.

Estimates of the impact of the Maastricht criteria are sensitive to the baseline projections that underlie the analysis, since these determine the extent to which policy needs to be changed to meet the criteria. For example, the projections made in OFCE (1993) at the trough of the recession, suggested that only Portugal and Luxembourg would meet the fiscal criteria by 1999. The OFCE estimated that public expenditure would have to fall by over 10 per cent per annum in some countries if they were to meet the deficit criteria by 1999. More recent projections, including our own discussed elsewhere in this report, suggest that the OFCE outlook may have been unduly pessimistic, with the European cyclical downturn having proved to be more attenuated than that in the early 1980s, and countries such as Germany, France and the UK having taken action to return their public finances towards their long-standing objectives.

The OFCE study suggested that the additional measures required to achieve the deficit criteria by 1999 would reduce EU output by 0.65 per cent with the biggest losses arising in Spain, Greece, Italy and the UK. The measures required to meet the debt target would reduce EC-wide GDP by 2 per cent by 1999, with output falling by 5 per cent in Italy and Belgium. The effects of the application of the Maastricht criteria in the OFCE study are large, in part because of the pessimistic baseline, but also because the offsetting effects from interest rates and exchange rates that might be expected are not fully taken into account.

Large output effects are also reported by Roberti and Visaggio (1994), who use simulations on the DRI model to examine the effects on Italy of meeting the fiscal criteria. They conclude that it would be possible for Italy to meet the deficit criteria, particularly if the aim was to do so by 1999. However, this would still leave the debt to GDP ratio at well over 100 per cent. Any attempt to run a large fiscal surplus in order to meet the debt target by 1999, would result in a severe and prolonged recession, with output growth over 1992-99 averaging around -1 per cent per annum.

Buiter, Corsetti and Roubini (1993) summarise the findings of two earlier studies by Giovannini and McKibbin and the IMF that assessed the effects of meeting the Maastricht criteria by 1996. Giovannini and McKibbin used the MSG model, with the 1991 deficit to GDP ratios projected into the future. The policy stance was then changed so as to reduce the deficit to 3 per cent of GDP by 1996. The

effects were again found to be larger in Italy than elsewhere, with output there initially falling by 11 per cent relative to base, but recovering to be 1 per cent below base by 1996. The main cause of this large output fall was the reduction in inflation to German levels, and the consequent rise in real interest rates, rather than the fiscal criteria themselves. The effects on other countries were more modest, with Germany experiencing a mild recession.

The IMF study used a baseline projection in which primary deficit to GDP ratios were held at their 1992 levels, and examined two possible scenarios for convergence of deficit and inflation rates by 1996. The first scenario assumed that interest differentials between Germany and other EU members were reduced as convergence occurs. The second simply assumed that interest rate differentials persisted at their 1992 levels. The cumulative output loss in the second scenario was around twice that in the first, again serving to highlight the importance of the monetary policy response to fiscal contractions.

Englander and Egebo (1993) report a number of fiscal simulations on a modified version of the OECD's INTERLINK model, taking 1992 projections as the reference scenario. Their results point to the possibility of asymmetric responses within Europe, reflecting differences in national wage and price flexibility. A reduction in fiscal deficits equivalent to 1 per cent of GDP is found to result in a cumulative output loss of 0.2 per cent of GDP over a 5 year period in Germany, but 1.65 per cent in a weighted average of France, the UK, Italy and Spain. A more recent version of the OECD model is described in Richardson *et al.* (1994). Their simulation results illustrate that a sustained rise in final government expenditure of 1 per cent of GDP will raise European output by 3.5 per cent after 6 years if nominal interest rates remain fixed. However, if interest rates respond, so as to maintain low inflation, then the additional expenditure will be crowded-out completely. The implications of this study can be reversed, and the implications for a fiscal contraction drawn. It should also be remembered that 'fixed nominal interest rates' is a diagnostic convenience for a modeller, not a permanent policy option available to the authorities.

Several recent studies have drawn on the work of Giavazzi and Pagano (1990) and have looked for the possibility of "expansionary fiscal contractions". It is claimed that a fiscal contraction can raise demand through various "non-Keynesian" routes. In a forward-looking world, a smaller fiscal deficit with a constant money target will lead to a decline in long-term interest rates and a depreciation of the exchange rate. This follows from the effect of the money target on short-term interest rates, which fall in every period. Hence rational financial market operators react, and long rates fall. The effect of lower long rates on investment and bond prices is expansionary, as is the effect of the

depreciation on net exports. We would expect these effects to partially offset the contractionary effects of the fiscal policy (and in a very small open economy they could completely offset them). Giavazzi and Pagano (1990 and 1995) go further. They suggest that consumers react positively to the prospect of permanently lower taxes, and raise their consumption. Bayar, Dramais, in't Veld and Roger (1996) and McDermott and Westcott (1996) suggest that expansionary fiscal contractions, due to a combination of the positive investment and consumption responses, may have been observed in Ireland, Denmark, Sweden and Norway in the 1980s. Whilst not denying the theoretical possibility of such events we do not believe that they offer a useful guide to assessing the economic impact of large fiscal contractions in the major European economies. Moreover even if fiscal contractions have expansionary effects on output, they may still lead to lower levels of employment in the short run if labour markets adjust slowly (Barry and Devereux (1995)).

III. The European Economies on NiGEM

Any analysis of the effects of the Maastricht fiscal criteria must be set in the context of a conception of the workings of the European economy. The work we have undertaken is based on the global econometric model, NiGEM. NiGEM is an estimated model which uses a 'New-Keynesian' framework, in that there is a significant role for active fiscal and monetary policies to help cope with deviations from equilibrium employment. Such policies can be used to ensure that sustainable employment is achieved more quickly. However, we do not believe that active fiscal and monetary policy can be used to change the level of output and employment permanently. There are policies that can be used to achieve these ends, but they involve more direct intervention in the workings of the market. These are not considered in this paper, but it is clear that longer term improvements in education, training and in the functioning of labour markets are essential.

The theoretical structure and the relevant simulation properties of NiGEM are described in Barrell, Sefton and in't Veld (1993), Barrell and Sefton (1996) and in NIESR (1996). The model contains estimated structures for the whole world, with the major economies having 60-90 equation models with around 20 key behavioural equations. Each country model has a consumption function that depends on income and wealth, investment equations, a set of export and import price and volume equations, a labour market with a long run sustainable level of unemployment embedded in it, and a set of relationships that determine domestic prices. All current accounts flow onto asset stocks, and there are

complete descriptions of the government sectors. Government debt is issued to finance the deficit, net of the money issue, and taxes affect expenditure.

Financial Markets

There are a number of important features in the version of NiGEM used for the policy analyses in this report.

- We assume, at least for the relevant period, that the ERM, including the UK and Italy, is in place, that the Bundesbank leads the ERM, and that German monetary policy determines interest rates in Europe. The US, Japan and Canada follow their own monetary targets. This avoids the complications of a switch in monetary regimes in the middle of a simulation.

- Financial markets are forward looking. If an announcement is made that suggests that policy will change in the future, then markets react immediately. Movements in exchange rates and long-term interest rates reflect expectations of the future path of short-term interest rates. Equity prices respond to changes in long term interest rates and the model returns to asset equilibrium.

All expectations are model-consistent, in that we assume financial market operators in the model have expectations that are consistent with the eventual outturns of the model. These features of the financial markets are important when comparing results across models, and they are, for instance, absent in many models, including those used by the European Commission and the OECD.

Labour Markets

Another key area of NiGEM is the modelling of national labour markets, with the setting of wages being closely connected to the determination of the level of employment. A general characterisation of our empirical approach is that a bargain between social partners determines the real wage, with employers setting the level of employment and higher unemployment leading a reduction in the real wage.

There are important institutional differences between national labour markets, particularly in the degree of forward-looking behaviour, that affect the flexibility of the real wage. We find that reaction speeds can vary greatly in different countries, although they are generally slow. In some countries, such as France and the UK, the bargain is over the *expected* real wage. In others, such as Spain and Italy, automatic indexation clauses have in the past been included in the bargain. However, these have now been removed: as a result the wage bargain has become more forward-looking in these countries. In contrast, Germany and the Netherlands (and Belgium) have been much more successful in combating inflation and bargainers appear to be willing (or are constrained) to accept compensation for past inflation only. Differences such as these mean that, at least while the ERM is in operation, a similar increase in demand in all countries can have significantly different short-term effects on wage inflation.

The outcome of the wage bargain will ultimately depend upon factors such as the relative strength of unions and the level of unemployment benefit, as well as the level of unemployment.

The National Institute has undertaken a number of studies of sustainable unemployment in Europe. The estimates in Barrell, Pain and Young (1994) suggest that sustainable unemployment is around 8 per cent in France and the UK, and 7 per cent in Germany. Once countries with a history of higher unemployment are taken into account, such as Spain and Italy, it is likely that sustainable unemployment in the EU as a whole is currently rather higher than this, possibly somewhere between 9 and 10 percent. When unemployment is above the sustainable level it puts downward pressure on wages, and employment will rise. However the process of adjustment is lengthy. The projections described above suggest that unemployment in many continental European countries will not reach its long-run level until the end of the century. The reasons for the rise in sustainable unemployment in Europe since the 1960s have been extensively discussed, with much of the relevant work covered in Layard, Nickell and Jackman (1991).

The characteristics of European labour markets have an important role to play in determining the employment effects of changes in fiscal policy. Key features of our labour demand and wage equations are reported in Table 1. The first column reports the substitutability of capital for labour, and the second gives a measure of the speed of response of employment to a change in wages. Both these factors have an important bearing on the employment consequences of fiscal shocks. For example, a fiscal expansion that raised aggregate demand and reduced unemployment would put upward pressure on wages. If firms could easily replace labour with capital, then employment would fall when wages rose.

This relative factor price effect would tend to offset the rise in employment initially generated by the increase in aggregate demand. If substitutability is low, then this offsetting effect would be less significant. Response speeds are also important. If substitutability was high, but the speed of response slow, then the offsetting employment effect would again be felt only gradually.

Table 1. Characteristics of European Labour Markets

	Labour Demand		Wages	
	Substitutability of Capital and Labour (1)	Response Speed (quarters) (2)	Effect of Unemployment (3)	Response Speed (quarters) (4)
Austria	-0.63	4.24	-2.3	6.66
Belgium	-0.53	17.23	-0.9	8.33
Denmark	-0.34	5.63	-0.9	8.00
Finland	-0.38	5.53	-1.7	10.45
France	-0.65	7.40	-1.4	12.45
Germany	-0.30	6.50	-4.1	8.30
Greece	-0.40	19.72	-3.0	3.26
Ireland	-0.66	4.20	-1.2	12.43
Italy	-0.81	3.90	-3.4	6.20
Netherlands	-0.53	17.23	-0.8	9.61
Portugal	-0.69	0.99	-2.0	4.49
Spain	-1.00	3.30	-0.8	6.40
Sweden	-0.27	6.16	-1.8	7.98
UK	-0.36	3.71	-0.4	3.88

Notes:(1) Elasticity of substitution between capital and labour. (2) Mean lag in response of labour demand to a change in wages. (3) Percentage change in wages in response to a 1 percentage point change in unemployment. (4) Mean lag in response of wages to a change in unemployment.

It is clear from the table that there are considerable differences between the European economies. Italy and Sweden make an interesting comparison in this respect as both would have to undertake significant fiscal contractions to meet the criteria in the Maastricht Treaty. Italy has a high degree of substitutability of 0.81 and a response speed of one year. Therefore any fiscal contraction which reduced aggregate demand, employment and wages would be expected to generate some substitution back into labour, offsetting some of the initial, demand driven, fall in employment. In Sweden the estimated degree of substitutability is much lower, at 0.27, so the scope for offsetting employment effects is more limited.

The labour demand relationship describes only one side of the labour market. The last two columns of Table 1 describe some of the characteristics of the wage equations used in the model. The third column shows the effect of unemployment on wages. A value of -2 would imply that a 1 percentage point rise in unemployment would lead to a 2 per cent fall in real wages. The effect of unemployment on wages varies considerably from -0.4 in the UK to -4.1 in Germany. In the fourth column we report a measure of the speed of response of wages to a change in unemployment; this also shows considerable variation. The UK and Germany experience one of the fastest responses whilst Finland, France, Ireland, and the Netherlands are much slower, perhaps reflecting the nature of the bargaining process.

Other studies (e.g. Layard *et al.* (1991), OECD (1995)) have found differing values for the effect of unemployment on wages and some differences in the relative position of these countries but a number of common threads can be found. Typically unemployment is found to have only a limited effect on wages in Spain. Morgan (1996) links this to the combination of stringent employment protection for permanent workers with the prevalence of temporary employment (around a third of total employment). In contrast, the effect of unemployment on wages in Germany tends to be much higher due to the nature of German industrial relations. Our analyses of labour markets have attempted to take account of endemic structural change in Europe. Anderton and Barrell (1995) found evidence for change in wage bargaining in several EU economies. In particular, Italian wage bargaining changed in the 1980s as the 'Scala Mobile' system of automatic indexing was dismantled. Barrell, Pain and Young (1996) present some evidence of changes in German labour markets in the 1990s, with a structural break in labour demand after unification. This work is extended in Morgan (1996a and 1996b), who reports structural changes in labour demand in Germany, and wage bargaining frameworks in Germany, Italy and Spain. We incorporate these structural changes in our analysis below, as we wish to use a model that represents behaviour of the 1990s, not the 1980s. Obviously we cannot easily predict future structural changes, but we have done our best to address the Lucas critique by constructing a stable, structural model, which includes forward-looking behaviour.

Fiscal Multipliers

The impact of any change in fiscal policy depends on the characteristics of the economy and on the monetary policy responses of the relevant authorities. The relationship between fiscal policy changes and the overall level of output can be summarised using fiscal multipliers. A multiplier of 1 after five years

would indicate that a 1 per cent of GDP rise in government spending now would raise GDP by 1 per cent in five years time.

A key feature of NiGEM is the use of tax rules to ensure that in the long run governments remain solvent (Barrell, 1994). These rules ensure that the budget deficit and the debt stock return to sustainable levels after any change in spending. Their importance to the solution of theoretically coherent rational expectations models is discussed at length in Barrell and Sefton (1996). If the analysis of any policy change is based on the assumption that the fiscal deficit and debt targets are unchanged in the long run, then a fiscal expansion now has to be offset by an increase in taxes and a fiscal contraction in the future. Table 2 gives details of the fiscal multipliers on NiGEM when the fiscal solvency rules are in place. After five years these multipliers are much lower than those in Whitely (1992, Table 5.1), when such rules are not in place.

Fiscal multipliers are generally small within Europe, in part because of trade integration. Europe is more dependent on external trade than some other large trading regions. Openness has been increasing over time, and hence estimated fiscal multipliers have fallen, with more demand being met through imports from outside the EU. A European-wide fiscal expansion raises output in each country by more than the increase when one country expands on its own. For instance, in Germany the first year effects of a 1 per cent of GDP fiscal expansion involve an increase in output of 0.75 per cent, whilst a European-wide expansion raises output by almost 1 per cent in the first year. The increase in the effect is even greater in the Netherlands and Belgium, where a fiscal expansion raises GDP by around 0.5 per cent when they act alone, but by a full 1 per cent when Europe acts in concert. This reflects their very open nature, with large proportions of output being destined for imports. However, these beneficial effects from concerted action are not necessarily universal. A fiscal expansion leads to higher interest rates and a higher real exchange rate, at least in the short run. Both have more of an effect on the UK than on other European economies, in part because it has a stronger orientation in trade to non-European markets. The UK also appears to be more responsive to increases in interest rates, with consumption being directly affected because of the mortgage finance system. As a result, output in the UK in the first year of an expansion rises by the same amount in both scenarios, and it is lower in the second year, when a concerted expansion takes place, than when the UK acts independently.

Table 2. Table of Fiscal Multipliers in Large European Countries

		EMU with Expansion in named Country				EMU with Expansion in all Countries			
		1	*2*	*5*	*10*	*1*	*2*	*5*	*10*
Germany	GDP	0.76	0.46	0.09	-0.22	0.93	0.54	0.07	-0.28
	Prices	-0.03	0.11	0.75	0.48	-0.04	0.14	0.91	0.58
France	GDP	0.51	0.54	0.11	-0.14	0.58	0.62	0.15	-0.21
	Prices	0.01	0.15	0.70	0.50	0.00	0.16	0.90	0.91
UK	GDP	0.62	0.47	0.11	-0.20	0.64	0.37	-0.09	-0.27
	Prices	0.05	0.22	0.67	0.21	0.02	0.18	0.51	0.06
Italy	GDP	0.45	0.46	0.15	-0.04	0.59	0.61	0.24	-0.07
	Prices	0.03	0.15	0.39	0.34	0.02	0.19	0.59	0.72
Spain	GDP	0.80	0.64	0.06	-0.19	0.94	0.78	0.17	-0.21
	Prices	0.01	0.10	0.53	0.33	0.00	0.11	0.66	0.58
Netherlands	GDP	0.60	0.53	0.53	0.41	0.99	0.90	0.46	0.03
	Prices	0.01	0.09	0.46	1.13	0.01	0.13	0.70	1.26
Belgium	GDP	0.53	0.41	0.41	0.37	0.98	0.72	0.44	0.09
	Prices	-0.13	-0.08	0.11	0.38	-0.29	-0.20	0.32	0.89
ECU						-1.19	-0.99	-0.42	0.22
Short-rate						0.24	0.24	0.27	0.13
Long-rate						0.22	0.21	0.14	0.05

Note: Numbers indicate the percentage change following a 1% of GDP rise in government consumption with the fiscal solvency rule in place.

IV. Prospects For The European Economy

Judgements about the prospects for monetary union and the fiscal measures required to achieve this goal are predicated on economic projections. Such projections provide a means of assessing the eventual impact of the present policy stance once the European economies have returned to a trend level of activity (Blanchard *et al.*, 1990). The baseline forecasts used in this paper are those described in the February 1996 edition of the *National Institute Economic Review*, augmented by projections for some of the smaller European economies. Table 3 summarises the baseline outlook for economic growth for the period 1996-2003 for the EU as a whole, and the seven largest EU economies. Overall, it was expected that growth would be below trend in the EU in 1996, before rising back to trend levels of 2½-3 per cent in 1997 and subsequent years.

Table 3. Prospects for Europe

GDP (percentage growth per annum)

	EU	Germany	France	Italy	UK	Spain	Neths	Belgiu
1996	2.1	1.9	2.1	2.0	2.6	2.3	2.2	2.0
1997	2.8	2.6	2.6	2.5	3.3	2.7	2.4	2.4
1998	2.8	2.5	2.5	3.0	3.2	2.9	2.5	2.6
1999-2003	2.7	2.5	2.4	3.1	2.5	2.6	3.1	2.6

Our assessment of the prospects of the major European economies satisfying the Maastricht convergence criteria is shown in Table 4. These projections take into account the announced future fiscal plans of the respective national governments available at the time that the baseline was constructed. If growth were to be significantly slower than we expect then the prospects for public finances are likely to worsen as tax revenues are lower and social security expenditure higher than we predict. Hence further measures would be required to meet the fiscal criteria and the associated employment and output affects in the simulations below would be correspondingly higher.

Although many countries are not expected to satisfy the convergence criteria fully by 1997, we still regard the baseline as being one which would permit a (limited) monetary union to be formed in 1999. We expect that it will be possible to produce plausible projections in 1997 which would show a number of countries meeting the criteria for government deficits and inflation by 1999. The two large countries which appear least likely to be eligible for membership of a monetary union are Italy and Spain, with our projections indicating that neither country may in fact meet any of the criteria. Other countries may fail to satisfy at least one of the criteria in full.

Table 4. Convergence and monetary union in Europe

Government deficits: per cent of GDP(a)

	Target	Germany	France	Italy	UK	Spain	Neths	Belgium
1992		-2.9	-4.0	-9.5	-5.0	-4.1	-3.9	-7.5
1993		-3.3	-6.1	-9.6	-6.9	-7.4	-3.2	-7.1
1994		-2.7	-6.0	-9.0	-6.6	-6.6	-3.2	-5.7
1995(b)	-3.0	-3.6	-5.2	-7.8	-5.4	-5.5	-3.5	-4.7
1996	-3.0	-3.4	-4.1	-6.5	-3.7	-5.6	-2.8	-3.7
1997	-3.0	-3.2	-3.5	-6.2	-2.8	-4.9	-2.4	-3.1
1998	-3.0	-2.7	-3.0	-6.3	-1.8	-4.1	-2.2	-2.5
1999	-3.0	-2.1	-2.8	-5.8	-1.0	-3.4	-2.1	-2.1

Government debts: per cent of GDP(c)

	Target	Germany	France	Italy	UK	Spain	Neths	Belgium
1992		40.6	43.3	112.2	44.0	52.0	77.8	135.7
1993		45.6	49.7	116.5	51.8	60.9	79.5	143.4
1994		48.5	53.0	119.3	53.5	65.7	78.3	143.2
1995(b)	60.0	61.4	55.7	119.4	52.0	72.2	79.5	145.4
1996	60.0	62.6	57.1	116.8	51.5	72.7	79.3	143.5
1997	60.0	62.2	57.7	114.9	50.9	72.5	78.5	140.3
1998	60.0	61.9	58.1	112.7	49.4	71.5	77.5	136.4
1999	60.0	61.3	58.4	110.0	47.2	69.6	76.4	132.2
2000-02	60.0	59.2	58.4	102.3	42.9	63.6	73.4	122.9

Government debts: Difference between Maastricht Definition and the OECD measure (d)

	Germany	France	Italy	UK	Spain	Neths	Belgium
1994	1.7	-4.7	6.1	-3.4	-2.7	-0.3	-8.2

Inflation Criterion: per cent (e)

	Target(f)	Germany	France	Italy	UK	Spain	Neths	Belgium
1992		4.7	2.4	5.5	4.7	6.4	3.0	2.4
1993		4.0	2.2	4.8	3.5	5.6	2.1	2.7
1994		2.8	1.8	4.7	2.5	5.1	2.1	2.4
1995(b)	3.4	1.9	1.8	5.2	2.7	4.6	1.9	1.6
1996	3.6	2.1	2.4	5.2	2.8	4.0	1.9	2.0
1997	3.6	2.0	2.1	4.5	3.4	4.3	1.8	2.2
1998	3.6	1.8	2.1	4.4	3.6	4.4	1.5	2.2
1999	3.6	1.6	2.1	4.5	3.6	4.6	1.4	2.2

Notes: (a) General government borrowing requirement. The government deficit to GDP ratio should not exceed 3 per cent and the government debt to GDP ration should not exceed 60 per cent unless the excess is either exceptional and temporary, or unless the ratio is declining toward the target level at a satisfactory pace. (b) Figures from 1995 are forecast figures. (c) Gross debt, using the standardised OECD definitions. (d) Amount by which the debt stock calculated on the definition used in the Maastricht Treaty exceeds the standard OECD definition in 1994. (e) Consumers' expenditure deflator. To meet the Maastricht convergence criteria, each country must have a sustainable price performance which means that its consumer price inflation rate must not exceed that of at most the three best performing states (in terms of price stability) by more than 1.5 per cent in the last year. (e) Calculated from the major seven. The inclusion of Austria, Denmark and Ireland could easily reduce the target by up to half a point.

The Netherlands is expected to meet all the criteria apart from the debt limit of 60 per cent. However, there would be a strong case for allowing the Netherlands to join with a debt stock of a little over 70 per cent as it is placed at a particular disadvantage by the focus on gross rather than net debt. Belgium would also fail the debt criteria as it has a debt stock well over 100 per cent, but it could argue that it was making sufficient progress towards reducing it. Alternatively, it should qualify for entry in the early part of the next century. It is clear, however, from both Commission statements and the 'Excessive Deficit' procedure, that countries making 'sufficient progress' in their reduction of debt would be rewarded. For instances, in May 1996 the Commission made Excessive Deficit rulings for all countries, and only Ireland, Luxembourg and Denmark were exempted. Although Ireland has a debt stock well in excess of 60 per cent of GDP, because its fiscal deficit has been under 3 per cent of GDP for some time, it was considered to be making sufficient progress. Similar leeway could easily be given to the Netherlands and Belgium by the turn of the century, but this would require that they reduce their deficits to below 3 per cent of GDP[1].

In a number of cases the projected national deficits are actually smaller than those achieved over the comparable period of 1984-89 when there was last a sustained economic upturn in Europe. For example, the average deficit in Italy over that period was 11.2 per cent, compared to an implied average of 6.9 per cent between 1994-99 on our baseline.

V. The Impact of Meeting the Maastricht Fiscal Criteria

Our forecast baseline is one in which the majority of the EU countries achieve a fiscal policy compatible with the requirements of the Maastricht Treaty by 1999, and hence there is less additional fiscal consolidation that needs to be undertaken than might be expected given the budgetary positions at the end of 1995. In this section we analyse the impact of the adjustments required to ensure that all countries satisfy the deficit and debt criteria, the former by 1999 and the latter by 2002. In each case we report the impact on employment in each member state, along with the changes in EU-wide output,

[1] If the deficit criteria is achieved and nominal GDP is growing at 5 per cent per annum or more, then eventually the debt stock target is approached, however high the starting value of the debt stock.

inflation and interest rates. In both scenarios, the fiscal contractions reduce nominal GDP growth, and hence increase the difficulties involved in achieving the required targets. We also evaluate these policies in the light of the discussion in section III.

Targeting Budgets

On our baseline, four countries fail to meet the deficit criterion by 1999. Italy, Greece, and Sweden need to tighten their fiscal policy significantly in order to meet the deficit criteria by 1999, whilst a much smaller tightening is required in Spain. We assume that this is achieved through a mixture of higher direct taxation and an immediate cut in the level of government expenditure, with the long run burden being evenly shared between them. The taxation component of the consolidation programme is assumed to be gradually implemented in order that the possibility of a sharp recession is reduced. Given our assumptions about monetary policy during the transition to EMU, the fiscal contraction is accompanied by a fall in European interest rates and a depreciation in the exchange rate of the European economies against the dollar[2].

On our baseline the Italian government has an average deficit of 6.5 per cent of GDP between 1996 and 1999. The measures required to achieve the deficit target by 1999 imply an average deficit of 4 per cent in those years. As a result, output growth would be 0.4 per cent a year slower than on our baseline, and a considerable amount of unemployment will be generated, as can be seen from Table 5. By the year 2000, employment would be some 160,000 less than in our baseline, raising the unemployment rate by 0.7 per cent. Thereafter employment slowly returns to where it would otherwise have been. The effects of achieving the deficit criteria are significantly greater in Greece and Sweden than they are in Italy. The average government deficit between 1996 and 1999 would have to be reduced by around 3 per cent of GDP in Sweden, and 4 per cent in Greece. Average output growth would fall from 2.5 per cent a year in Sweden to around 1.8 percent, and it would fall from 2.5 per cent a year to around zero in Greece. Significant output gaps would emerge, and in 1999 the unemployment rate in Sweden and Greece

[2] A deprecation of the Ecu against the Dollar is shown as a positive change from base in the simulation tables.

would have risen above our baseline by some 2 percentage points and 3 percentage points respectively.

Table 5. Targeting Budgets. Unemployment and Output

	1996	1997	1998	1999	2000	2001	2002
Unemployment(a)							
Austria	0.00	0.00	0.00	0.02	0.05	0.07	0.10
Belgium	0.00	0.00	0.00	0.02	0.02	0.05	0.07
Denmark	0.00	0.03	0.03	0.10	0.13	0.19	0.21
Finland	0.00	0.00	0.00	0.04	0.04	0.08	0.08
France	0.00	0.00	0.00	0.02	0.03	0.05	0.05
Germany	-0.01	-0.01	0.00	0.03	0.06	0.08	0.09
Greece	0.60	1.81	2.76	3.34	3.59	3.60	3.41
Ireland	0.00	0.00	0.00	0.07	0.07	0.07	0.07
Italy	0.01	0.11	0.34	0.57	0.69	0.68	0.55
Netherlands	0.00	-0.01	0.00	0.01	0.04	0.08	0.09
Portugal	0.00	0.00	0.00	0.02	0.02	0.02	0.02
Spain	0.00	-0.01	-0.01	0.03	0.12	0.17	0.04
Sweden	0.14	0.71	1.49	2.14	2.49	2.54	2.35
UK	0.00	-0.01	-0.03	-0.03	-0.02	-0.01	0.00
EU Total	0.02	0.08	0.16	0.24	0.30	0.31	0.28
EU GDP(b)	0.01	-0.06	-0.19	-0.32	-0.4	-0.41	-0.34
EU Inflation(c)	0.01	0	-0.02	-0.06	-0.1	-0.13	-0.14
Short-term rates(c)	0	0.01	0.01	0	-0.01	-0.03	-0.05
Long-term rates(c)	0	-0.04	-0.05	-0.06	-0.07	-0.07	-0.07
Ecu/$ rate(b)	0.31	0.32	0.33	0.33	0.32	0.31	0.29

(a) effects on unemployment as a percentage of the labour force. (b) per cent deviation from base. (c) percentage point deviation from base.

The effects elsewhere are noticeable, with EU GDP declining by 0.4 per cent from base by the end of the decade, although overall employment falls by only around a half a million. Some countries benefit because they are affected more by lower interest rates and a lower exchange rate than they are by a reduction in demand in the three economies with a tighter policy. The UK for instance has slightly higher employment as a result of a tighter fiscal policy in the high deficit countries.

Even with a fiscal contraction on the scale shown it is unlikely that either Italy or Greece would be able to enter a monetary union in 1999, since both would continue to miss the required inflation 'target'. Given the baseline projections, both would still have inflation well above the target level, with the impact of the fall in demand being slowed by inertia in the labour market

and partially offset by the rise in import prices induced by currency depreciation. A monetary tightening, along with an initial appreciation of the currency, would be necessary if, say, Italy was to fulfil all the criteria, as the fiscal contraction alone only reduces inflation by 0.3 per cent in 1999. We have undertaken such an analysis by repeating the scenario in Table 6, adding a change in the money target in Italy, which is considered fully credible, to ensure that the inflation rate converges on that of Germany early in the next century. As a result, the Italian exchange rate initially rises by 9 per cent, and by the year 1999, inflation falls by just over 1.1 per cent as compared to our base, bringing it just inside the Maastricht target. The unemployment costs are significantly higher than those associated with the fiscal contraction above, with growth 0.5 per cent lower for five years, with most of the effect coming in the first year. On average, Italian unemployment would be 1 per cent higher between 1996 and 2000 than in Table 5.

These costs are high, but it might be considered that they are not excessive. We have argued in section II that countries with a high real growth rate, and higher measured inflation because of structural change, could have higher deficits and still achieve the debt stock target. In addition, the relative price changes, as associated with a changing structure.

Targeting Debt Stocks

Although our projections suggest that most countries will meet the deficit criteria by 1999, Italy, Belgium, The Netherlands, Austria, Greece and Sweden fail to meet the debt stock criteria. We have undertaken an experiment where deficits are reduced sufficiently that they might be expected to reach the debt stock target by 2002. The debt target in the Maastricht Treaty allows countries to qualify for EMU *if '...the (debt) ratio is declining toward the target level at a satisfactory pace'*. If in 1999 a country's public finances were on course to achieve a debt stock of 60 per cent of GDP in 2002, this would certainly seem to satisfy the debt criterion. Indeed it could be argued that our interpretation of this criterion is unnecessarily restrictive for countries with very high debt stocks, most notably Belgium and Italy, who may be able to show satisfactory progress in 1999 without reducing their debt stocks to 60 per cent of GDP until later in the next century. Ultimately the decision on whether a country's debt stock allows it to qualify for EMU will be a political one.

Achieving the debt criterion is much more difficult than the deficit criterion because a significant contraction has to be in place for some years before its effects are felt. Once again we assume that the new targets are achieved by sharing the burden between spending and direct taxation, with the fiscal contraction generating a fall in interest rates and an initial currency depreciation. We argued in section II that the rationale for achieving the debt stock target quickly is weak, and that the deficit and debt stock targets are only consistent if nominal GDP growth is 5 per cent. We would argue that rapid achievement of the debt target is neither desirable nor likely.

Belgium has the largest distance to move, reflecting the size of their debt stock relative to GDP, although, given their prospective baseline fiscal deficits, Greece actually has to undertake the largest fiscal contraction. Italy would have to reduce its average deficit for 1996 to 1999 to 0.5 percent of GDP, Greece and Sweden would have to reduce their deficits by an average of 10 and 7 per cent of GDP per annum respectively. The required fiscal contraction in the Netherlands and Austria is much smaller than in the other four countries.

This concerted fiscal contraction would reduce employment in the Community by around 1.6 million by 2002 and thus raise the unemployment rate by 1.1 percentage points as compared to our baseline. The unemployment rate in Italy would rise by 2.6 percentage points, whilst in Belgium it would be up by 2.5 percentage points, and in the Netherlands it would be 1.5 percentage points higher. The effects on Sweden and Greece are much larger, with unemployment rising by 6 per cent in the former and 7 per cent in the latter. These effects are large because Greece has to make such a sustained contraction, and Sweden has low inflation, making debt reduction more costly. Overall, GDP in the EU is some 2.6 per cent below our baseline by the year 2000, although the reductions are concentrated in just a few countries. Average output growth over 1996 to 1999 would fall by 2.5 per cent in Italy, 0.8 per cent in the Netherlands, and 1.7 per cent in Belgium. The reduction would be larger in Sweden, where average growth would fall from 2.5 per cent to only 0.7 per cent a year over the five year period. Output in Greece would fall by 2.5 per cent a year for five years rather than rise by a similar amount over the period, and inflation would fall from 8 per cent to 3 per cent. The costs of these adjustments cannot be seen as negligible, particularly in the absence of any significant degree of fiscal federalism.

Table 6. Targeting Debt Stocks. Unemployment and Output

	1996	1997	1998	1999	2000	2001	2002
Unemployment(a)							
Austria	-0.03	0.00	0.03	0.07	0.17	0.36	0.52
Belgium	0.19	0.84	1.45	1.90	2.22	2.40	2.48
Denmark	0.00	0.03	0.10	0.16	0.25	0.37	0.49
Finland	0.00	0.00	0.04	0.08	0.12	0.20	0.28
France	0.00	0.04	0.12	0.20	0.24	0.25	0.22
Germany	0.02	0.14	0.30	0.42	0.49	0.52	0.52
Greece	0.84	2.86	4.77	6.11	6.87	7.16	7.05
Ireland	0.00	0.07	0.07	0.14	0.14	0.20	0.20
Italy	0.57	2.10	3.35	3.80	3.66	3.21	2.63
Netherlands	0.03	0.22	0.56	0.89	1.16	1.36	1.47
Portugal	0.00	0.00	0.02	0.04	0.06	0.06	0.08
Spain	0.01	0.04	0.14	0.26	0.38	0.43	0.27
Sweden	0.30	1.45	3.09	4.60	5.61	6.09	6.03
UK	-0.01	-0.04	-0.08	-0.10	-0.10	-0.10	-0.08
EU Total	0.12	0.48	0.84	1.06	1.15	1.14	1.05
EU GDP(b)	-0.77	-1.74	-2.34	-2.6	-2.66	-2.58	-2.36
EU Inflation(c)	0.07	-0.16	-0.41	-0.61	-0.72	-0.77	-0.77
Short-term rates(c)	0	-0.02	-0.08	-0.16	-0.24	-0.35	-0.47
Long-term rates(c)	0	-0.43	-0.5	-0.56	-0.59	-0.61	-0.6
Ecu/$ rate(b)	2.53	2.52	2.47	2.38	2.25	2.06	1.81

(a) effects on unemployment as a percentage of the labour force. (b) per cent deviation from base. (c) percentage point deviation from base.

Returning To Past Behavior: Abandoning Maastricht

In order to evaluate the effects of the Maastricht fiscal conditions it is useful to undertake an analysis where the criteria are effectively removed and an alternative policy is pursued. We feel that it would be a mistake to choose some arbitrary level at which to set deficits, and that it would be wrong to ignore past behaviour. Our preferred alternative policy stance is one in which countries choose to pursue policies similar to those adopted across the previous cyclical expansion in the latter half of the 1980s.

Details of public sector deficits in Europe from 1984 to 1989 (before the temporarily beneficial effects of German unification) are given in Table 7, along with our own projections for 1994 to 1999. Some countries, such as the UK, France and Germany, had tighter fiscal policies in the 1980s than we are projecting for the 1990s, but even with this looser stance they are still expected to be well within the fiscal criteria. Hence we have not assumed that they would choose to pursue an alternative policy to the one shown in our baseline. Other countries, notably Ireland, Portugal, Belgium, Italy and

Greece, are assumed to pursue a looser policy, and they would adopt the average target from the late 1980s. It is of course not clear that this would be either sensible for them, or acceptable to the Bundesbank, if they wish to join a European Monetary Union. There may also be little political will in some of the countries to run higher deficits in future; we doubt if the Irish for instance would wish to change their present policy stance.

Table 7. Historical and Projected Deficits as a Percent of GDP

	Average 1984-89	Average 1994-99
Austria	-3.2	-4.0
Belgium	-7.9	-3.6
Denmark	0.0	-1.6
Finland	3.5	-3.9
France	-2.2	-4.1
Germany	-1.5	-3.0
Greece	-11.9	-9.2
Ireland	-7.6	-1.0
Italy	-11.2	-6.9
Netherlands	-4.6	-2.7
Portugal	-6.1	-4.4
Spain	-4.6	-5.0
Sweden	0.9	-6.2
UK	-1.4	-3.6

The reactions of financial markets to policy changes depend upon their view of the impact of the new policies and their expectation of the likely reaction of the monetary authorities. We assume that the Bundesbank would continue to target a fixed rate of inflation in Germany even in the face of stronger demand. As a result, the adoption of an expansionary fiscal policy is likely to be accompanied by an increase in interest rates and an initial currency appreciation. These monetary changes on their own are contractionary, but are eventually offset by the effects of the fiscal expansion.

However, the fiscal expansion is actually delayed; although policy is expected to be significantly more lax in Belgium, the Netherlands, Greece and Italy by 1999 than on our base, there is little initial change in expenditure and taxes in these countries. As the monetary response is immediate, the initial impact of the announced change in fiscal policy reduces employment everywhere, although not by a large amount. As policy becomes more expansionary during the late 1990s, the unemployment rate in Italy falls by 1 percentage point by the turn of the century, and by around 0.5 of a percentage point in the Low Countries. There are also large effects in Ireland. These gains are transitory but sustained for several years. The overall impact on the Union is more uncertain, as the initial financial effects of the expansion generate lower

employment than on our baseline for several years in the UK, France and Germany, as can be seen from Table 8.

Table 8. Returning to Past Behaviour. Unemployment and Output Effects

	1996	1997	1998	1999	2000	2001	2002
Unemployment(a)							
Austria	0.00	0.03	0.03	0.02	0.00	-0.02	-0.07
Belgium	0.00	-0.07	-0.19	-0.38	-0.57	-0.78	-0.98
Denmark	0.00	0.00	0.00	0.00	-0.03	-0.06	-0.12
Finland	0.00	0.00	0.00	0.00	0.00	0.00	-0.04
France	0.00	0.00	0.01	-0.02	-0.05	-0.06	-0.07
Germany	0.00	0.01	-0.04	-0.09	-0.13	-0.17	-0.22
Greece	0.00	0.00	0.00	-0.02	-0.02	-0.12	-0.31
Ireland	0.00	-0.21	-0.76	-1.65	-2.40	-2.79	-2.78
Italy	-0.02	-0.15	-0.46	-0.79	-1.03	-1.15	-1.21
Netherlands	0.00	-0.03	-0.13	-0.30	-0.51	-0.73	-0.97
Portugal	0.00	0.06	0.02	-0.16	-0.31	-0.40	-0.41
Spain	0.00	0.00	-0.01	-0.04	-0.08	-0.11	-0.14
Sweden	0.00	0.00	0.00	-0.02	-0.07	-0.11	-0.18
UK	0.00	0.00	0.01	0.03	0.04	0.04	0.05
EU Total	0.00	-0.03	-0.09	-0.18	-0.26	-0.32	-0.36
EU GDP(b)	0.03	0.16	0.39	0.61	0.78	0.92	1.05
EU Inflation(c)	0.01	0.02	0.06	0.13	0.2	0.26	0.32
Short-term rates(c)	0	0	0.01	0.04	0.07	0.1	0.15
Long-term rates(c)	0	0.19	0.25	0.32	0.39	0.47	0.56
Ecu/$ rate(b)	0.35	0.36	0.4	0.46	0.55	0.68	0.85

(a) effects on unemployment as a percentage of the labour force. (b) per cent deviation from base. (c) percentage point deviation from base.

The gains from abandoning Maastricht are rather limited, but they can be used to help gauge the potential scale of the effects of the Maastricht fiscal criteria. We could add the positive effects of this expansion and the negative effects of full implementation of Maastricht. Our analyses suggest that unemployment would be around 1.4 percentage points (2.2 million) lower in Europe as a whole if Maastricht were abandoned as compared to if it were implemented in full. However, we do not expect, and do not advocate, either the rigorous implementation of the criteria or the return to the fiscal profligacy pursued by some countries in the past.

VI. Conclusions

In this paper we have argued that fiscal consolidation is necessary in Europe. A concerted fiscal contraction has some extra costs associated with it, but in the short to medium-term the employment (and output) costs of meeting the Maastricht fiscal criteria are not great, at least for the majority of countries. However it is not clear that it would be wise to induce countries with large debt stocks to contract rapidly. Any attempt to do so could have serious consequences for employment and output.

We have also argued that the effects of a fiscal action, if solvency is maintained, are ultimately transitory. The effects on output in, say, Germany disappear eventually if government spending is increased, but the deficit left unchanged. However, a permanent fiscal contraction should lower real interest rates, and recent research by Phelps (1992) and Barrell, Morgan and Pain (1995) has suggested that this will reduce unemployment directly. Hence short-term pain would be replaced by long-term gain, strengthening the argument for fiscal consolidation.

June 1996

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Acknowledgements

This work is partly based on the results of a study carried out for the European Parliament, (Barrell, Morgan and Pain, 1995), to whom we are grateful for funding. This work has been presented at Project LINK meeting, UN, New York 26th. March 1996 and revised for presentation at the conference on European Unemployment, European University Institute, Florence, Italy 13th April 1996. We are grateful for comments from participants at both these conferences.

References

Anderton, R., and Barrell, R. (1995), 'The ERM and Structural Change in European Labour Markets: A study of 10 countries', *Weltwirtschaftliches Archiv*, Band 131, Heft 1.

Arrowsmith, J. (1995), 'Economic and Monetary Union in a Multi-Tier Europe', *National Institute Economic Review*, 152, pp.76-96.

Barrell, R. (1994), 'Solvency and Cycles', National Institute Discussion Paper No. 65.

Barrell, R., Morgan, J. and Pain, N. (1995), 'The Employment Effects of the Maastricht Fiscal Criteria', Report to the European Parliament.

Barrell, R., Morgan, J., Sefton, J., and in't Veld, J.W. (1994), 'The Cyclical Adjustment of Budget Balances', National Institute Report Series No. 8.

Barrell, R., Pain, N., and Young, G. (1996) 'Cross Country Comparisons of Labour Demand in Europe', *Weltwirtschaftliches Archiv*, 132, December.

Barrell, R., Pain, N., and Young, G. (1994), 'Structural Differences in European Labour Markets', in Barrell R. (ed.), *The UK Labour Market: Comparative Aspects and Institutional Developments*, Cambridge, Cambridge University Press.

Barrell, R., Sefton J. and in't Veld J.W. (1993), 'Interest rates, exchange rates and fiscal policy in Europe', National Institute Discussion Paper No.44.

Barrell, R. and Sefton, J. (1996) 'Fiscal Policy and the Maastricht Solvency Criteria', *Manchester School*, forthcoming

Bayar, A., Dramais, A., in't Veld, J. and Roger, W. (1996), 'Non Keynesian Effects of Fiscal Contraction', European Commission mimeo presented to Project LINK.

Bayoumi, T. and Eichengreen, B. (1994), 'Restraining Yourself: Fiscal Rules and Stabilisation', CEPR Discussion Paper No.1029.

Begg, I. (1995), 'The Social Consequences of Economic and Monetary Union', *European Parliament Working Paper*, Social Affairs Series, No. E1.

Bini-Smaghi, L., Padoa-Schioppa, T. and Papadia, F. (1994), 'The Transition to EMU in the Maastricht Treaty', *Princeton Essays in International Finance*, No. 194.

Barry, F. and Devereux, M.B. (1995), 'The 'Expansionary Fiscal Contraction' Hypothesis: a Neo-Keynesian Analysis', *Oxford Economic Papers*, Vol.47, No.2, pp.249-264.

Blake, A. and Pain, N. (1994), 'Investigating Structural Changes in UK Export Performance: The Role of Innovation and Direct Investment', National Institute Discussion Paper No. 71.

Blanchard, O., Chouraqui, J-C, Hagemann, R.P. and Sartor, N. (1990), 'The Sustainability of Fiscal Policy: New Answers to an Old Question', *OECD Economic Studies*, 15, Autumn.

Bean, C.R.(1992), 'Economic and Monetary Union in Europe', CEPR Discussion Paper No. 722.

Buiter, W.B., Corsetti, G. and Roubini, N. (1993), 'Excessive Deficits: Sense and Nonsense in the Treaty of Maastricht', *Economic Policy*, 16, pp.57-100.

Canzoneri, M. and Diba, B. (1991), 'Fiscal Deficits, Financial Integration and a Central Bank for Europe', *Journal of Japanese and International Economies*, 5, pp.381-403.

Correia-Numes, J. and Stemitsiotis, L. (1995) 'Budget deficits and interest rates: is there a link? International evidence.', *Oxford Bulletin of Economics and Statistics*, 57, pp. 425-450.

de la Dehesa, G. (1995), 'EMU Paradoxes', in *EMU Prospects*, Group of Thirty Occasional Paper No. 50.

Dornbusch, R. (1976) 'Exchange Rates Expectations and Monetary Policy', *Journal of International Economics* 6(3), August, pp. 231-244.

Eichengreen, B. (1992), 'Should the Maastricht Treaty Be Saved?', *Princeton Studies in International Finance*, No. 74.

Englander, S. and Egebo, T. (1993), 'Adjustment under Fixed Exchange Rates: Application to the European Monetary Union', *OECD Economic Studies*, 20, pp.7-40.

Giavazzi, F. and Pagano, M. (1990), 'Can Severe Fiscal Contractions be Expansionary', NBER Macroeconomics Annual.

Giavazzi, F. and Pagano, M. (1995), 'Non Keynesian Effects of Fiscal Policy Changes', mimeo.

Hills, J. (1989), 'Counting the Family Silver: The Public Sector's Balance Sheet 1957 to 1987', *Fiscal Studies*, 10, pp.66-85.

Holland, S. (1995), 'Squaring the Circle? The Maastricht Convergence Criteria, Cohesion and Employment', mimeo.

Layard, R., Nickell, S. and Jackman, R. (1991), *Unemployment: Macroeconomic Performance and The Labour Market*, Oxford University Press.

McDermott, C. and Westcott, R. (1996), 'The Economic Effects of Fiscal Consolidation', IMF mimeo presented to Project LINK.

Morgan, J. (1996), 'Structural Changes in European Labour Markets', *National Institute Economic Review*, February.

Morgan, J. and Pain, N. (1996), 'The World Economy', *National Institute Economic Review*, February.

NIESR (1996), *The National Institute World Model Users Manual*, February.

OECD (1994), 'General Government Gross Debt in the European Community', *OECD Economic Outlook*, 55, pp.17.

OECD (1995), *The OECD Jobs Study: Evidence and Explanations Part II, The Adjustment Potential of the Labour Market*, OECD, Paris.

OFCE (1993), 'La Convergence en Europe: Bilan et Perspectives', *Document de Travail*, No. 93-02 - October.

Pain N., Westaway P. and Young, G. (1994), 'Public Sector Borrowing Over The Cycle and in The Long Run', *The Business Economist*, 25, 5-20.

Phelps, E. S. (1992), 'Consumer Demand and Equilibrium Unemployment in a Working Model of the Consumer-Market Incentive-Wage Economy', *Quarterly Journal of Economics*, August, pp. 1003-1032.

Richardson, P., Giorno, C. and Thurman, S. (1994), 'Macroeconomic Performance and Fiscal Policy Adjustments in the Medium-Term: Alternative Medium-Term Scenarios', OECD Economics Department Working Paper No. 148.

Roberti, P. and Visaggio, M. (1994), 'Fiscal Adjustment between Fiscal Harmonization and the Maastricht Convergence Criteria', in Baldassarri, M. and Roberti, P. (eds.), *Fiscal Problems in the Single-Market Europe*, St. Martin's Press, New York.

Van den Noord, P. and Herd, R. (1993), 'Pension Liabilities in the Seven Major Economies', OECD Economics Department Working Paper No. 142.

Whitley, J. (1992) in Barrell, R. and Whitley J. (eds) (1992), *Macroeconomic Policy Co-ordination in Europe: the ERM and Monetary Union*, London, Sage Publications.

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